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CASES IN COUNTRY PRACTICE.

By JOHN ELLIS BLAKE, M.D., OF MIDDLETOWN, CONN.

[Communicated for the Boston Medical and Surgical Journal.]

No. VI.—NON-PEDUNCULATED FIBROID TUMOR OF THE UTERUS.

JULY 10th, 1861, I was called to a neighboring town to see, in consultation, Mrs. —, aged about 36. She had, I was informed by her attending physician, a large tumor of the uterus, which had been extruded so as to present in the vagina. The process of expulsion had been accompanied with severe pains, resembling the regular throes of a natural labor. The hemorrhage had been free, but the patient (who was a large and robust woman) did not seem to be very much prostrated by it. Many attempts had been made, I was informed, to get a ligature over the tumor for the purpose of strangling it, but all had failed. On examination, nothing like a pedicle could be felt, but the part of the tumor within the womb seemed fully as large as the extruded part, and the thin edge of the os uteri could be felt upon it. I made up my mind that I had to deal with a tumor starting from a broad base from the uterine wall, and that it would be quite difficult, from its size and shape, to ligate it. I endeavored, however, to do this, but could not succeed. After consultation, it was decided that I should attempt its removal by cutting, and that this should be done cautiously on account of the danger of hæmorrhage. The tumor being drawn downwards with claw forceps, I removed a portion the size of an English walnut. This was followed by some little bleeding. A repetition, however, of the attempt, by which a piece about twice the size of the first was cut away, gave rise to a most alarming hæmorrhage. For twenty minutes every appliance that we could bring to bear—as ice, tampons wet with liq. ferri. persulph., &c. &c.—was of little avail in checking the bleeding, which was at length stopped by the tampons, firmly pressed in the vagina, and maintained there by a bandage between the limbs, attached behind and before to a “binder,” around the body.

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The portions of the tumor removed, had a rather suspicious appearance. Showing in section of a bluish white color, and cutting with a creaking sound, I feared lest the tumor might prove to be malignant. The microscope, however, showed nothing that might not be expected in the common fibrous tumor, and nothing more was found in a section of it which Dr. C. Ellis, of Boston, was kind enough to examine for me.

The tampons were removed, as soon as it could be done with safety. About ten days or a fortnight afterwards, at the urgent solicitation of the patient, renewed attempts were made to effect the ligature of the tumor, but unsuccessfully.

On consultation, it was then decided that the risk of bleeding should be taken, and that the mass should be removed. I effected this with a pair of stout curved scissors, using the left hand as a director, the tumor being cut out piecemeal. The several portions united, measure about twelve inches in circumference now, and the whole mass before contraction, and with its fluids, was larger than this. The operation was easily done, save where it was necessary to work within the os uteri, as some little care was here required to avoid injury. This time there *was but little bleeding*. I account for this in this way. In the London *Lancet*, March 16th, 1861, Dr. J. Baker Brown relates several cases, where uterine non-pedunculated tumors of the fibroid variety were successfully treated by cutting into them, and gouging out a portion of their substance. To do this the more readily, Mr. Philip Harper has invented a set of gouges which remove *cores* of different sizes. It is claimed that by repeating this coring process, the vitality of these growths is destroyed, and that they become absorbed. Now if this idea of Dr. Brown's be correct, why may we not suppose that, in the case just related, the removal of portions of the mass by the first operation did destroy its life in a measure, cause contraction, and almost put an end to its vascularity? If this result can be depended upon, there will be an end to the clumsy unsurgical operation by ligature; tedious, and not wholly free from danger. The first step will be to remove a core from the tumor, the second to extirpate it by the knife or scissors without further delay. Time and well-devised experiments will perhaps show this to be the best way.

In conclusion, I would say that the patient recovered without a bad symptom, and is now about, a healthy woman.

A FAMILY MADE SICK BY VEAL SOUP AND CUSTARD PIE.

By B. F. TAFT, M.D., BLACKSTONE, MASS.

[Communicated for the Boston Medical and Surgical Journal.]

On the 28th of July ult., Dr. Wilder, of Blackstone, Mass., was called about 8 o'clock, P.M., to visit a family consisting of the father, mother, five daughters and one son, the youngest being 16 years

old. They lived on a farm in a healthy location, and had been in good health previously. Their dinner on the day mentioned consisted of veal soup, bread and butter, and custard pie. They all ate of the soup and pie except two of the daughters; one of whom ate soup, and bread and butter, but no pie, the other ate bread and butter and pie, but no soup. They felt nothing unusual until about 6 o'clock, when they sat down to supper, and the father was seized, while at table, with violent vomiting, and shortly after commenced purging. The mother and three of the daughters were soon taken in a similar way. The son went for Dr. Wilder, and while in his office he complained of feeling sick at the stomach, and the doctor gave him a dose of tr. opii. camph. and tr. rhei, when the sickness and pain subsided, but he had several evacuations from the bowels. On arriving at the house, Dr. Wilder found the five above-mentioned vomiting and purging, the parents being the most violently affected, there being some blood in the discharges, the extremities cold, and the pulse being hardly perceptible at the wrist. They complained of severe griping pains about the region of the stomach. Dr. W. gave them brandy and laudanum, but the vomiting and pain continuing, he gave ginger tea and paregoric, and afterwards a pill of opium, camphor and calomel. They did not seem to improve, and at midnight, being a partner of Dr. Wilder's, I was called, and upon consultation it was agreed to give an anodyne composed of chloroform half a tea spoonful, camphor ten grains, morphine one fourth of a grain, with a view to arrest the pain and vomiting. To the father, whose pulse was still weak, and the extremities cold, cayenne pepper tea was given in small quantities, and a sinapism was applied over the stomach. About 1 o'clock they all felt easier, and a little before 2 a smaller dose of the above mixture was given to such as were not quite easy. At 3 o'clock all the patients were in the realms of Morpheus. At 6 o'clock, A.M., of the 29th, the physicians left, ordering the patients to take each a table-spoonful of Epsom salts, and if they were thrown up to take a similar dose an hour after, and to repeat it hourly until a dose was retained. None of the family vomited except the father, and he did not take a second dose of the salts; he had several discharges from the bowels, and continued to vomit occasionally through the day.

On the evening of the 29th, I visited the family again and found them all improving, except the father, whose worst symptom was the vomiting; his pulse was full and strong, 100 beats per minute. A sinapism eight by ten was applied over the stomach, and after it had been on half an hour one half of a Seidlitz powder was given, which was retained. In applying the sinapism, the patient called my attention to his umbilicus, where a rupture was discovered the size of a large grape, which was easily reduced and a compress and roller were applied. In one hour from the time when the first half Seidlitz powder was given, the other half was given and retained. The patient slept very well all night, vomited a few times on the

30th, but had no discharges from the bowels. On the 31st, I was again called about 4 o'clock, P.M., the patient thinking he needed something to act on the bowels. He was ordered to take a Seidlitz powder, and if there were no discharges by 9 o'clock, P.M., he was to take three of the compound cathartic pills, of the U. S. Dispensatory, which produced the desired effect. He recovered without further treatment, as did the rest of the family.

It would seem that the vomiting and purging in these cases was caused by eating the soup and pie together; as the girl who ate soup without pie, and the one who ate pie, bread and butter but no soup, were not at all affected.

ON THE TREATMENT OF SUSPENDED ANIMATION UNDER THE
INFLUENCE OF CHLOROFORM.

By WILLIAM MARCET, M.D., F.R.S., ASSISTANT-PHYSICIAN TO THE WESTMINSTER
HOSPITAL, ETC., ETC.

IN the *Medical Times and Gazette* for July 20, I offered a few remarks on the phenomena attending the accumulation of vapors of chloroform in the blood, and insisted on the importance of watching the state of the respiration as well as that of the pulse during the exhibition of this anæsthetic agent. The number for October 28, of the same periodical, containing two new cases of death from chloroform, I may be perhaps allowed to return to this subject, my present object being to suggest a mode of treatment in these cases which to my knowledge has not yet been proposed; and considering the failure which has nearly constantly attended every attempt to restore animation suspended by an overdose or under the influence of chloroform, the following suggestions will be most probably of interest, and also, I trust, of practical utility.

It has frequently occurred to me that, in many instances, the final cause of death from chloroform was owing, not only to its anæsthetic properties, but also partly to spasm of the glottis. I do not mean, however, that the passage of the vapor of chloroform through the glottis and larynx has the power of causing an involuntary closure of the glottis; and I cannot agree with Dr. Black, of St. Bartholomew's Hospital, who states, "Any concentration of the vapor of chloroform which can be breathed is safe; any condition of dilution which causes the patient to cough or hold his breath is dangerous, and if persevered in for half a minute, may be fatal." I believe a spasmodic closure of the glottis to take place occasionally from the action of the chloroform which has been absorbed into the blood, and that this obstacle to the admission of air into the lungs, taken in connection with the narcotic or anæsthetic effect of the chloroform circulating in the blood, has been in some, perhaps many, cases the actual cause of death. Should this view be correct, it will follow that if air be allowed to enter the lungs by means of tracheotomy, or by opening the glottis with a trachea-tube, or any other

operation which will effect the same purpose, life will in such cases be saved.

It may be inferred that spasm of the glottis takes place occasionally under the influence of chloroform.

1st. Because several substances possessing anæsthetic properties are positively known, when present in the blood, to have given rise to closure of the glottis.

2nd. Because the symptoms of death from chloroform are consistent, more or less, with death from sudden asphyxia.

3rd. Because the post-mortem appearances after death from chloroform may be accounted for by assuming that death has taken place from asphyxia.

In the three following cases, spasmodic closure of the glottis resulted from the presence of alcohol, carbonic acid and sulphuretted hydrogen in the blood, the physiological properties of these three substances being allied to a certain extent to those of chloroform; and in two of the instances under our consideration, life was obviously saved by tracheotomy.

A very interesting case is reported in the volume of the *Medico-Chirurgical Transactions* for 1837, entitled, "Case of Recovery from the Insensibility of Intoxication by the Performance of Tracheotomy. By George Sampson, Esq." The patient, aged 31, was brought to Mr. Sampson's house in a state of complete insensibility after drinking freely of beer, and more than a pint of brandy; all voluntary motions had ceased for at least four hours. The stomach-pump being used, drew off between three and four pints of fluid, the greater part of which appeared to consist of brandy. Every means of exciting vomiting was afterwards vainly applied; the man became more comatose, his countenance turgid, and breathing more and more difficult; the pulse grew fainter, and was at last scarcely perceptible. He was then removed to the Infirmary, and a consultation was held with the other medical attendants, who arrived in the course of half an hour; at that time every appearance indicated the rapid approach of death, and there was no ground to justify a reasonable hope of recovery. It occurred to Mr. Sampson when standing by the patient's bed-side that the extreme difficulty of respiration was owing to the existence of "collapse of the glottis," and with this view of the case, he strongly urged that a trial should be given to the operation of tracheotomy. The operation was accordingly performed, without loss of time, by Mr. Andrews. The trachea was no sooner opened, than the distension of the veins about the head and neck subsided, the violent efforts of the respiratory muscles ceased, and in about half an hour regular and easy respiration through the wound was freely established. At the same time the pupils became slightly sensible to the stimulus of light, and the pulse returned to the wrist. He continued quiet during the night, but had no return of consciousness till the following morning. The case proceeded very satisfactorily, and the wound being healed in about three weeks, the patient was discharged cured.

This case is particularly interesting, for the analogy between the physiological action of alcohol and chloroform has been quite satisfactorily demonstrated by Messrs. Lallemand, Perrin, and Duroy. Like alcohol, chloroform acts first on the brain, then on the spinal system, and finally on the sympathetic; the brain exerts a certain power of concentrating within its tissue both chloroform and alcohol; the period of excitement produced by chloroform, is not unlike that of alcoholic intoxication; and insensibility equally results when a sufficient dose of alcohol or chloroform has penetrated into the circulation.

If alcoholic poisoning is positively shown to have threatened life from asphyxia owing to spasm of the glottis, I see no reason why death from chloroform should not be due occasionally to the same phenomenon.

The two other cases I have to report have come under my own observation. One of them was an instance of secondary asphyxia, from spasm of the glottis, after immersion in the Serpentine during the skating season. The patient, a middle-aged man, had been entirely under water, but on being taken out, respiration returned, and continued comparatively free until placed in a warm bath, when he suddenly exhibited alarming signs of asphyxia, obviously from spasmodic closure of the glottis. A few minutes later the patient was removed to a bed, when several similar attacks occurred, one of them still more severe than the first. He recovered in the course of some hours.

This is an instance of spasm of the glottis produced by an accumulation of carbonic acid in the circulation. The gas in question possesses anæsthetic properties, and is so far allied to chloroform.

The third case is one of equal interest, although the subject of the observation was a dog. About two years ago, when engaged in injecting an aqueous solution of sulphuretted hydrogen into the external jugular vein of a dog, I observed that the animal's respiration, instead of becoming somewhat deeper, as usually happens during this operation, began to fail, and shortly afterwards ceased, without there being the slightest struggle or apparent symptom of asphyxia from the closure of the glottis. I immediately prepared to have recourse to artificial respiration by means of an instrument I have invented for that purpose. In order to insert a tube into the trachea, I incised this organ, when immediately, to my surprise, the animal commenced breathing through the opening. After a few minutes free respiration and sensibility returned, and the animal recovered perfectly. It is obvious that, in the present instance, the respiration had been arrested by closure of the glottis, and the animal was dying from asphyxia; had not tracheotomy been performed, the dog would certainly have died with every symptom of syncope. This case, which I report from memory, was witnessed by many of the pupils of the Westminster Hospital. It shows two interesting facts:

1st. That the presence of an excessive quantity of sulphuretted hydrogen in the blood may cause death from spasm of the glottis; and, 2nd. That on those occasions death takes place without the struggles or convulsions so peculiar to impeded respiration. Consequently, in cases of death from chloroform, the absence of convulsions is no proof that there exists no mechanical obstacle to the free admission of air into the lungs.

The symptoms of death by chloroform are consistent with those of asphyxia. Dr. Snow's book contains a very interesting case of death from chloroform, with symptoms of asphyxia, which was communicated by Dr. Solly to the *Medical Gazette*. This case (No. 12) bears directly on the subject of the present communication. The patient, a porter, aged 48, and apparently in perfect general health, was submitted to chloroform for the removal of a toe-nail. The anæsthetic vapors were administered by means of an inhaler; after the operation had been performed, and being still insensible, the patient's face became dark, his pulse small, quick, but regular, respiration laborious; his neckerchief was removed and chest exposed to fresh air from a window near to the bed, cold water was dashed on his face, the chest rubbed, and ammonia applied to the nose. After struggling for about a minute, he became still, the skin cold, pulse scarcely perceptible, and soon ceased to be felt at the wrist. Immediately on the appearance of these symptoms artificial respiration was commenced by depressing the ribs with the hands and allowing them to rise again, until the proper apparatus was brought, when respiration was kept up by means of the trachea-tube and bellows, and oxygen gas introduced into the lungs by the same means. Galvanism was also applied, but to no purpose.

Dr. Snow considers there is some obscurity about the above narrative, which I have given as nearly as possible in the same words as those used in the report; in his opinion the symptoms exhibited would be inconsistent with death from chloroform. It appears to me, however, that this is clearly a case of asphyxia from spasm of the glottis under the influence of chloroform, and I cannot help believing that had treacheotomy been performed at the time when artificial respiration was commenced, the patient would have been saved. If most cases of death from chloroform are not attended with evident signs of asphyxia, still this is no argument in favor of the absence of spasm of the glottis, for it must be remembered that poisoning by chloroform is a complex phenomenon which results from excessive anæsthesia producing a tendency to paralysis of the muscles, and an action on the heart predisposing to death by cardiac syncope; any spasmodic closure of the glottis occurring under these circumstances would, it may be anticipated, cause sudden death without the recurrence of convulsions, or struggles for breath.

The post-mortem appearances in cases of death from chloroform

do not preclude the idea of death from asphyxia; indeed in cardiac syncope, which is according to Dr. Snow the fatal termination of poisoning by chloroform,—“If the blood have not been displaced by artificial respiration or other causes, the right cavities of the heart and the adjoining great veins will be found filled with blood and the lungs will in many cases be more or less congested. The appearances, in short, will be very much the same as in asphyxia by privation of air which ends in a kind of cardiac syncope.” Nothing can be more in favor of the view I am advocating. It must be well understood that I do not consider every case of fatal poisoning by chloroform as owing to spasm of the glottis, and there is every reason to believe that in some instances death takes place from paralysis of the muscles of respiration, in others from cardiac syncope, or from a simultaneous occurrence of both these effects.

If it be admitted that death from chloroform be occasionally owing to spasm of the glottis, then the importance of performing tracheotomy in these cases, and adopting some means of allowing air to enter freely through the wound, will be readily understood. It must be remembered that the cases on record of recovery from suspended animation owing to an overdose of chloroform are very few, and, as a rule, it may be considered that, after the respiration has ceased, and the pulse become hardly perceptible at the wrist, death is inevitable. Under these circumstances, any means apparently available should be adopted. The operation of tracheotomy ought to be performed as soon as possible after the respiration has stopped, and the patient assumed that livid countenance known in these cases to precede death: the loss of every second diminishes the chance of saving life. Artificial respiration, if possible, must however not be neglected, and should be carried on before, during, and, if necessary, after the operation of tracheotomy has been performed. Artificial respiration is of great importance in connexion with death from chloroform, and I am at present busily engaged inquiring into this subject.—*Medical Times and Gazette.*

THE MANOEUVRES OF THE SANITARY DEPARTMENT OF THE SWISS ARMY.

As far as I am aware, the organization of the Sanitary Department of the Swiss army is totally unknown abroad, and as it possesses many interesting and instructive peculiarities, I will to-day send you a short account of it; and, I believe, the best way to do this will be to report to you the doings of one of the last “sanitary courses,” which are held every six months, and which I have personally witnessed.

A number of Medical men, sick attendants and commissaries of ambulances were assembled in Zurich. The Staff-Surgeon first gave

them instruction in the organization of foreign armies as well as of the Swiss forces, and the execution of the sanitary measures necessary for the efficiency of the service, the ambulances and Hospitals, the general administration, the keeping of accounts, &c. They were then shown the whole material necessary for the sanitary arrangements, and had to practise its application, unpacking and re-packing. Especial attention was called to the transport of the sick and wounded by rail and other means of locomotion, regard being had to the experience gained in the last wars. Manœuvres were then made under the command of the chief Staff-Surgeon of the Swiss army. A sham fight by the artillery and the infantry took place for the forcing the passage of a river, and thirty soldiers were left wounded along the banks, ticketed with cards stating the kind and locality of the wounds. This was done in order to test the efficiency of those attendants whose special duty is the search for, and the transport of, the wounded.

At a certain distance from the line of battle, on both wings of the force, the surgeons set up in order to dress the wounded; all necessities, straw, water, &c., being provided in abundance. A certain number of attendants and their helpers then advanced to the field of battle, searched for the wounded, made a rough preliminary dressing, and then transported them on suitable carriages to the Surgeons' tents where the real dressing was done, as simply as possible. Dressings with triangular towels were used for the wounds of the upper extremities, of the head and the feet, and for a large proportion of the wounds of the thigh. For fractures, different forms of single and double splints were employed, and the several methods of applying the gypsum bandage were practised—gypsum being always at hand in the Swiss ambulances. Capsules which are moulded for enclosing the whole extremity, and are only open at the top, will also be shortly introduced. This is of great importance, as they are superior to any other contrivance for the transport of the wounded. For limiting the use of the tourniquet as much as possible, the attendants and their helpers are practised in digital compression of the principal arteries, the experience of the Russian and English armies during the war in the Crimea having fully shown that this is far preferable to the use of the tourniquet. In the Italian campaign of 1859, therefore, scarcely any tourniquets were used; and even when amputations were made, digital compression was exclusively employed.

At a suitable place an ambulance was put up, and with the greatest rapidity a tent, which afforded room for about twenty wounded persons, was struck, and a transport waggon mounted. The attendants then unpacked the material, prepared beds in the tent, and a field-kitchen, according to the French system, in its neighborhood; in from fifteen to twenty minutes the flag waved from the tent as a signal that all was ready for the reception of the wounded. The chief of the ambulance assigned their proper places to every Sur-

geon and attendant, &c. A waggon, drawn by a horse, was sent to fetch the wounded from the Surgeon's tents on the wings of the force; such wounded persons as were still able to walk, followed the waggon on foot. They were then taken to the operating tables; the wounds were closely examined, the necessary operations made, and durable dressings put on; everything being done "*tuto, cito et jucunde*." The commissary of the ambulance meanwhile distributed the material and made the necessary entries, while the waggon continually brought fresh supplies of wounded.

In the meantime another party had formed a suitable lazaret in a house and shed in a neighboring village, to which, in order to prevent a crowding of the ambulances, the wounded were from time to time transported, and there properly cared for. These proceedings were continued until all the wounded had been brought in, after which, the ambulances were cleaned and repacked, and the tent raised.

By these exercises the sanitary field service was practised in its whole extent, and the connexion and the mutual action of all its parts clearly shown. In order to afford a better view of the whole and to avoid loss of time, the several stations for rendering aid were situated much nearer to each other than would be the case in real warfare.

I must not omit mentioning that we have no special sanitary troops, as is the case in some foreign armies, since the number of combatants would be thereby too much diminished; but the sick-attendants form the nucleus of the sanitary troops, and if these do not prove sufficient, assistants are taken from the ranks. The attendants therefore are both soldiers and nurses, and these exercises, by making them acquainted with all improvements introduced in the sanitary arrangements, render them more efficient than elsewhere. I have seen the sanitary service of the French armies during the whole of the Italian campaign of 1859; and in comparing with it the Swiss, I cannot speak too highly of the zeal and efficiency of the latter.

Two such sanitary courses as just described are held every year, —one for our Eastern, the other for the Western forces, and in each two or three sham dressings and nursings of wounded take place, and always under varied circumstances. By their means the commissaries' attendants and their assistants are made practically acquainted with the details of the service and their respective duties, and such young medical men who have only seen civil practice have the opportunity of learning the difference between this and military surgery. The circumstance that every medical man in Switzerland is, at the same time, civil and military physician, has perhaps some drawbacks, but I think the preceding lines have shown that it is also not devoid of advantages.—*Correspondence of Med. Times and Gazette.*

Bibliographical Notices.

Quinine as a Prophylactic or Protective from Miasmatic Poisoning, a Preventive of Paroxysms of Miasmatic Diseases, together with some Remarks upon its use in the treatment of developed Miasmatic Diseases. By STEPHEN ROGERS, M.D., U. S. A., formerly Assistant Physician to the Island Hospital, New York, and Surgeon to Panama Railroad Company; Licentiate of the Royal University of Havana, Cuba, &c., Surgeon of the 7th Regt. N. Y. 8vo. pp. 24.

THE present season, and the present position of our armies, give special interest to anything on the subject of malaria, and the means of checking its poisonous influence upon our troops. Quinine has been administered blindly in the most wholesale manner, and very certainly, in many instances, with decidedly pernicious effect. Unquestionably it is an agent capable of doing immense good if administered understandingly, but equally capable of mischief if given hap-hazard and ignorantly. Many of the medical men in the army are having their first experience in its use as an antidote to malaria, and really do not understand how and when to give it, except when positive symptoms of infection manifest themselves. Its use affords a grand opportunity for those gentlemen who wish to rise above mere routine practice, to study the precise nature of its power under different modes of administration, and to lay down definite rules when and how it should be given with the most likelihood of success as a preventive of malarious disease.

The little pamphlet of Dr. Rogers is a valuable contribution to our knowledge on this subject. Speaking, as he does, from personal experience, we are prepared to accept his statements with special respect. He states that for four years he was constantly inhaling the noxious atmosphere of the miasmatic localities of the isthmus of Panama, and did not suffer a single attack of malarious disease; an immunity which he attributes entirely to the use of quinine. The author gives to the fever which, under the name of remittent, bilious remittent, acclimating fever, &c., attacks the unacclimated in the tropical regions of the world or the miasmatic localities of our own country, the name of "First Miasmatic Fever." He says of it that

"The law relating to this fever is similar to, or identical with that observed by yellow fever, in localities where it is an annual endemic, viz., the longer one resides, under any circumstances, in the locality where it is suffered, the less liable he becomes to its attacks.

"A species of toleration of the surrounding influences is acquired, lessening the impression of the poison upon the sensorium; so that after more or less time, aided perhaps by a depression of the powers of life and consequent want of vital force to sustain a violent contest, the intense and destructive character of the fever ceases to occur, except in the rare cases just alluded to."

The time necessary to secure this acclimating process, without passing through the ordeal of the disease, the author says, without hesitation, is secured by the proper employment of quinine. Such acclimation may occur without its use in certain cases; he feels confident it will in all, if this drug is taken in the right way. In all cases, the longer the attack is postponed the milder it invariably is, but quinine may prevent it altogether. The dose to be given to secure this result is an important question, and the author's experiments have led him to the conclusion that "doses too small to produce a sensible and de-

cided impression upon the nervous system, are not to be depended upon." The rule he adopted, therefore, was to give it daily to exposed persons, in a dose sufficient to cause an evident impression, to be repeated when the impression begins to subside. Four grains administered once in twelve hours, were usually enough, and in some cases three answered the purpose, while others required still more. The dose was regulated by the effect.

But the question arises how long must the drug be taken to secure a permanent protection. Few persons are willing to be dosing forever while living in a malarious district—when shall the medicine be stopped? Ordinarily our author would limit its use to thirty days, on the principle which he has laid down, that after a somewhat prolonged residence in such a locality, malarious disease, if it come at all, is sure to be of a mild type. The author sums up his experience, therefore, in the following rule:—

"The rule then for all cases is, when men are about to be exposed to miasm, give them from three to five grains—according to known effect—before exposure, and repeat the dose once in *twelve* hours, during the whole period of exposure, up to about thirty days in the *permanent* resident; extending it even to sixty days in the *transient* resident, where there are peculiar reasons for desiring to avoid subsequent miasmatic disease; not forgetting that cases often occur, wherein it will be necessary to repeat the dose once in *eight* hours to keep up the required *quinine effect*, which is our only certain guide, and is to be carefully watched and maintained in all cases.

"Another rule is, no quinine is required after exposure ceases."

In the subsequent chapters of his interesting paper, the author considers the subjects of the prevention of the disease in those who have become infected by the malarious poison, and the cure of the fully declared disease. He concludes with the following summary of deductions:—

"First—When men are to be sent into miasmatic localities, either from ships or from land forces, a dose of quinine sufficiently large to produce some appreciable evidence of its action, should be taken by every one before entering such locality, and should be repeated once in twelve, and in some cases once in eight hours (which it will be the physician's duty to ascertain and prepare for), during the time spent there.

"Second—That the removal from a miasmatic atmosphere for any twelve hours, and especially during a night, is quite equivalent as a protective, to one dose of quinine; it may be much more economical, and, when practicable, is by far the most desirable protective measure.

"Third—That in all cases where this measure can be daily practised, it will unquestionably preserve the susceptibilities of the brain to the action of the medicine, for an indefinite and probably long period, and will thus serve indirectly as a most efficient protective.

"Fourth—That officers and chiefs in command, should by all means avail themselves of the advantages to be derived from such intermissions in exposure, and thereby maintain their susceptibility to the quinine more or less unimpaired. By so doing, the loss of their important services would be rendered much less liable, and the consequent embarrassment to operations would almost surely be avoided.

"Fifth—That when continuous exposure is inevitable, there is no safety in attempting to protect from infection by the use of quinine, for a longer time than two months, and as a general rule, it is not advisable for longer than one month.

"Sixth—That ceasing its administration at this period, by the time the infection takes place, and the premonitions appear, the susceptibilities to the medicine will have become so restored that it will be practicable generally to prevent the paroxysms for long periods of time.

"Seventh—That as quinine is a stimulant, with specific action in all conditions

of depression or exhaustion from miasmatic poison and miasmatic disease, it is indicated in all cases, irrespective of the state of the skin, when the unaided powers of life are likely to be unable to restore to healthy action within the time required to avoid a renewed attack, and also when there may be danger that the vital forces will be overwhelmed by the poison in the onset of the disease, and that when so indicated, it should be promptly and efficiently employed, either by the stomach or rectum, as the case may demand.

"Eighth—That by an observance of these rules, and by avoiding the causes of other diseases, most men of even ordinary constitutions can be kept in miasmatic localities for years, in an efficient state of health."

This little pamphlet is well-timed and instructive; we hope the author's views may be sustained by the experience of those whose duty calls them now to the poisonous districts of our Central and Southern States.

Hints and Observations on Military Hygiene; with the best means of treating the Medical and Surgical Diseases of the Army. By LAURENCE TURNBULL, M.D., one of the Surgeons of the Howard Hospital. Reprinted from the *Medical and Surgical Reporter*. Philadelphia, 1862. Pamph., large 8vo., pp. 62.

This is a condensed, practical treatise on the principal topics indicated in its title, which are likely to engage the attention of the military surgeon of the present day. The author has brought together the results of the experience of the best European and American authorities, and the flexible covered pamphlet which is the product is a very convenient, and likely to be a very useful companion to our Surgeons in the field. It is eminently practical.

Amputation of the Cervix Uteri.—A paper read before the New York Academy of Medicine, April 16th, 1862. By A. K. GARDNER, M.D. Reprinted from the *Bulletin of the New York Academy of Medicine*. 8vo., pamph., pp. 16.

This is the history of a case of extraordinary hypertrophy of the neck of the uterus, causing great prolapsus, so that the os protruded an inch or more beyond the vulva. The enlarged portion was removed by Dr. Gardner with scissors, the operation being gradually performed, the hæmorrhage being arrested by twisting or compression as each vessel was severed. The portion removed weighed four ounces and one hundred and sixty grains. The patient recovered. The dangers to be encountered, and avoided, if possible, in doing this heroic operation, are fully discussed by the author, and the whole history is a very interesting one. The pamphlet concludes with an interesting account of the previous puerperal history of the patient by Dr. Shelton, of Jamaica, L. I., which is, however, not altogether written in the best taste.

The Domain of Medical Police. Abstract of a paper read before the New York Sanitary Association, Feb. 6th, 1862. By LOUIS ELSBERG, A.M., M.D.

This is an outline or sketch of the general subject of the public health, and those particular influences, public and private, which are more or less operative against it in every community; with some suggestions for their removal, and some discussion of the question how far the authority of the law may interfere in certain cases.

 THE BOSTON MEDICAL AND SURGICAL JOURNAL.

 BOSTON: THURSDAY, AUGUST 21, 1862.

SURGEONS FOR THE NEW LEVY.—The sudden call to arms of six hundred thousand men brings with it a demand for the services of the medical profession, which it needs all the stimulus of patriotism to meet. Six hundred thousand men will, under the present laws, require eighteen hundred medical men to fill the offices of regimental and assistant surgeons. The fact is somewhat startling to contemplate, and it is important that our brethren should be preparing their minds for the responsibility which it implies. In this State alone over a hundred surgeons will be required to fill the offices in the new regiments. We may well ask, where are so many fit men to be found? As a general rule, thus far Massachusetts has done well in its appointments on the medical staff. A careful preliminary examination has had the effect of sifting out very thoroughly the chaff from the wheat, and the urgent need of the time has called into the field some of the best men of the profession. We sincerely hope that the same care will be exercised now, and that the exigency of the moment will not lead to the appointment of men unworthy of the place. Above all, there should be no favoritism; no commissions given on personal grounds alone. Such appointments are more than likely to fall upon those who could get them in no other way, and who are therefore the last persons who should have them. Of course it must be a matter of extreme difficulty to find so many men as are wanted who are practically familiar with the most important operations of surgery. This is a serious evil, as novices are only too ready to signalize themselves by daring operations. An extract which we printed last week fully confirms this statement. Operative surgery in reality, as the experience of the past year has proved, constitutes the smallest part of the duty of an army surgeon; his chief duty is to treat disease, and dress rather than make wounds. Such being the fact, there are hundreds of men in Massachusetts competent at this moment to assume the responsibilities which belong to the office. There will always be some among those who obtain appointments, whose special tastes and previous experience fit them particularly for the graver operations likely to be necessary. This fact must come out in the course of their examination, or through the personal knowledge of the State medical commission, and upon such men the duty should be put. The mind shudders at the thought of an amputation taking *an hour and a half* in its accomplishment, commenced by the flap operation and ending by circular incision, such as we are credibly informed has, at least in one instance, within a year, been done by the bungling hands of a novice, whose official position should have been no warrant for such an outrage. As the post of brigade-surgeon has been recently abolished, we know of no way, unless it be through the medical director of a division, by which the responsibility of doing capital operations may be assigned by any medical officer above the rank of regimental surgeon to the men especially fit. If such authority does exist, we sincerely hope it may be exercised without any undue delicacy. We

trust that the spirit which leads so many of our brethren to give up their practice at home, to incur the dangers and the labors of military life, will lead them to abstain from making their position an excuse for undertaking what they ought not to perform, if more competent men are at hand.

With regard to assistant surgeons, we see no reason why, in the present emergency, medical students in the last year of their course may not receive the appointment. The position is subordinate, and does not call for any professional knowledge which is not at the command of many we could name, whose youth and physical vigor also admirably qualify them for the arduous labor which its duties impose.

MENORRHAGIA.—*Successful Treatment by means of the Perchlorure de Fer.*—M. Torresini had under his care a young girl who had suffered for two months from a continual menorrhagia, which was steadily increasing, had greatly enfeebled her and produced the chlorotic hue. Having tried in vain ergotine, savin, tannin, the tannate and sulphate of iron, he administered forty and the next day eighty drops of the *perchlorure de fer* in the course of twenty-four hours. From the first doses the flowing sensibly diminished, and continued to do so until it ceased altogether. At the end of a week the patient had recovered much of the strength and color of health.

A robust working-woman applied to M. Torresini on account of a very copious puerperal flow. Forty drops of the perchlorure given in four doses were sufficient to stop it. Two days after, the patient having made an imprudent effort, the hæmorrhage recommenced. The same remedy, in the same dose, stopped it, and she resumed her occupations. A chloro-anæmia following it disappeared under the prolonged use of sulphate of iron. To these cases reported by M. Torresini, M. Dieudonné adds four other similar cases occurring in his own practice. In two cases this medicine was given at first; in the others, M. Dieudonné had recourse to rhatany, ergotine, alum and tannin without success. The dose was from four to six grammes of the solution of perchlorure de fer in about one hundred and fifty grammes of distilled water, taken in the course of twenty-four hours. The best way of disguising the taste of the dose, is to add to it a sufficient quantity of peppermint water.—*Journal de Médecine de Bordeaux* from *Gaz. Méd. Ital. et Jour. de Med. de Bruxelles*.

CONSIDERATIONS IN REFERENCE TO HEALTHY, IN CONTRA-DISTINCTION TO DISEASED JOINTS. (From a paper by JOHN SWINBURNE, M.D., Albany, N. Y.) In the *Philadelphia Medical and Surgical Reporter*, vol. vii., p. 40, will be found an article, quoted from the *San Francisco Medical Press*, for July, in which Dr. E. S. Cooper lays down what he calls new surgical principles, and enumerates them, from 1 to 7. In the main, I think the doctor correct, but while all this may be true of a diseased joint, I would make the pertinent inquiry:

1st. Were you, as surgeon, to find a healthy knee-joint, opened for two, three or four inches in length, with a clean cutting instrument, would you allow it to heal by granulation? or would you rather close it, by metallic sutures, as carefully as possible, with the object of obtaining union by the first intention?

2d. Were you to treat a punctured wound of the same joint,

would you close it, allow it to suppurate, or would you rather convert it into a full and free incision?

3d. In the operation for the removal of false cartilages from the joint, should your incision be large and free, and allow the same to heal by granulation? or should you strive to remove the cartilage by subcutaneous incision, and so heal the wound by the first intention?

There are some important considerations in reference to healthy, in contra-distinction to diseased joints, which require further consideration, and I candidly confess (with my limited experience) that I am unable to give a solution of them. I would, therefore, invite the profession to investigate, carefully, this important and intricate matter.—*Philad Med. and Surg. Reporter.*

To which the Editor of the San Francisco *Medical Press* replies as follows:

[*To 1st Inquiry*—We would answer, that the parts should be brought together, with the view of effecting healing by first intention; but, at the same time, if the least purulent matter should be found in the joint afterwards, we would re-open it at once, and then make the wound heal by granulation.

To 2d Inquiry—We would not convert the small punctured wound into a free incised one, immediately upon being called to such a case, if of recent occurrence, but would do so at once afterwards, if we discovered that there existed a single drop of purulent matter in the joint.

To 3d Inquiry—In removing foreign bodies from the knee-joint, we always make an incision sufficiently free to remove the substance readily, and then, generally, favor healing of the wound by first intention, by bringing the parts together, but never resort to the subcutaneous section. We have, however, operated, several times, by direct incision, and afterwards applying lint in the wound caused it to heal by granulation, and, in every case, with favorable results; but were led to quit the plan, in consequence of concluding that it kept the wounds somewhat longer in healing.

The rule we have fixed upon, after modifying our practice somewhat from that pursued when first we departed from the beaten track by disregarding the admission of atmosphere, is to favor the healing of fresh wounds of healthy joints by the adhesive process, but wounds of suppurating joints we make to heal by granulation.

REMARKS.—In the treatment of all the wounds about the knee-joint, whether accidental or made by the knife, we apply a roller around the limb as tightly as the patient can conveniently bear, commencing at the toes and continuing half way up the thigh. The pressure of the roller has great influence in interrupting the mischievous process of suppurating and disorganization, which is the bane of these cases. A single drop of purulent matter is first generated from some portion of the injured synovial membrane, which, being of a soft and vascular structure, is disposed to suppurate under the influence of a slight inflammation: and this disposition to suppurate in a synovial membrane, together with the extent of development of this structure, in and around the joint, accounts for the rapidity with which purulent matter accumulates, in many cases, after the slightest wounds, such as those made by the puncture of a penknife. The pressure of the

roller interrupts, to a considerable extent, the flow of blood to this as well as all other soft structures entering into the formation of the joint.

Around the joint are numerous bursæ mucosæ, in which the disorganizing process often begins, though it may subsequently involve the entire knee-joint. This is, by far, more frequently the case than any one not much accustomed to making incisions into suppurating cavities about the knee would form any idea of. We have repeatedly made incisions into what we supposed, prior to the operation, to be suppurating joint cavities, but found the purulent collection altogether external to the capsular ligament. In these cases, the same excruciating pain and rapid accumulation of pus took place as occurs when the joint itself is previously involved. The application of a roller, immediately upon the reception of an injury involving the extra capsular tissues alone, would, in many instances, prevent the formation of purulent matter at all; but, when once it commences, nothing but opening the parts, freely, offers any prospect of an early cure.

—*San Francisco Medical Press.*

THE following is an extract from a report to the Sanitary Commission, by its actuary, Mr. E. B. Elliott, which is now in press :—

"Since one hundred and four (104.4) out of every thousand men (officers and privates together) in the entire army is the constant proportion of sick, it follows that, to secure in the field a constant force of five hundred thousand (500,000) *effective* (or healthy and able) men, the nation must constantly maintain in hospitals, or elsewhere, an additional force of fifty-eight thousand (58,000) sick men, making the entire force maintained, both sick and effective, to consist of five hundred and fifty-eight thousand (558,000) men; four per cent., or 22,000 of this entire force, would be commissioned officers, and ninety-six per cent., or 536,000, enlisted men. And since to supply continuous losses in the ranks of the enlisted men, other than losses from expiration of service, requires recruits at the annual rate of 229 per 1000 enlisted men, it follows, that to keep the ranks of these 536,000 enlisted men constantly full, will require annually 123,000 recruits, 29,000 of these recruits being demanded to supply the annual loss occasioned by death; 54,000, the loss arising from discharges from service, mainly from disability; 27,000 for excess of desertions over returns of deserters to duty; 7000 missing in action, not subsequently otherwise accounted for, and 6000 the loss from other causes.

"To repeat—assuming the returns of the period from the 1st of June, 1861, to the 1st of March, 1862, as the basis of calculation, it follows, that to secure in the field a constant force of 500,000 effective men, the nation must not only maintain 58,000 sick men, but it must also recruit the ranks of the enlisted portion of these forces with new material, at the rate of 123,000 per annum, so long as the war shall last; a rate somewhat exceeding 10,000 recruits per month. Of these 123,000 annual recruits, 83,000 are to supply losses by death and discharges from service (exclusive of discharges for expiration of its term); 34,000 for desertions and missing in action (not returned or otherwise accounted for); and 6000 to supply other losses specified and unspecified.

"The five hundred thousand (500,000) effective men are equivalent

in number to the number of men in 572 regiments of the average numerical strength (that is, 872 men each); and the 58,000 sick equivalent to 67 regiments of average numerical strength; the entire force of 558,000 men to be maintained being equivalent to 640 regiments of average strength."

HEALTH OF PROVIDENCE.—The health of Providence in July, as indicated by the mortality returns, was so remarkable as to deserve a brief notice. The number of deaths (61) was one less than in June; 31 less than in July of last year, and 25 less than the average for July during the last six years. The number was also less than in any year, except one, since 1842, when the population was less than half the present number. The fact that there were less deaths in July than in June is unprecedented in the 22 years of registration in this city.

The proportion of deaths under 5 years of age was unusually small. Of the 30 decedents of American parentage, only 9 were under 5 yrs., and the average age of the whole 30, was 31 years. Of the 31 decedents of foreign parentage, 17 were under 5 years, and the average age of the whole number was 22 years.

It is probable that the low temperature of July was one cause of the small number of deaths among children. Since the beginning of the present month, there has been a considerable increase of mortality.
—*City Registrar's Monthly Report.*

THE oil wells at Enniskillen, C. W., are yielding more abundantly than was at first described. There are about 200 wells at that place, which average 5,000 barrels a day. Out of one well 40 gallons were pumped in two minutes. Another well yields a barrel in 30 seconds, or nearly 3,000 barrels a day. Enniskillen is 20 feet above the level of Lake Huron, and 600 feet above the level of the sea. The rock is a little over 40 feet below the surface of the earth, and the wells vary in depth from 100 to 230 feet, or from 50 to 180 feet below the rock. Vessels and transportation fail to meet the increasing supply of oil, and much of it is wasted. Eighteen months ago the oil district was a wilderness; it now contains 600 inhabitants, and the number is increasing. The price at the wells is \$1 per barrel, and the empty barrels sell at \$2 each.—*Gas Light Journal.*

LONDON SURGEONS.—In a letter to the *Amer. Med. Times*, Professor Charles A. Lee, says: "The London surgeons operate more fearlessly, and with more rapidity than ours do on our side of the Atlantic; but I very much doubt whether more successfully, except in particular cases. Thus I saw Mr. Ferguson operate for double cleft palate last week, and the operation was completed in fifteen minutes. He afterwards informed me that the average duration of the operation of staphyloraphy in his hands was ten minutes, and that out of one hundred and five cases, he had met with complete success in one hundred and two. This must be admitted to be extraordinary activity and marvelous success. But much of this success is owing to previous frequent manipulations by the finger of the patient, or a tooth brush, of the fauces and parts adjacent, and to the very free separation of the velum palati from the bone, so as to allow great distension. The profession is indebted to Mr. F. for this practice, which he introduced many

years ago, but has recently been claimed by another surgeon as having originated with him."

MR. EDITOR,—In my communication in the last week's JOURNAL, *Accidental Resection of the Elbow-joint*, I notice the omission of part of a sentence in the second paragraph which I wish to correct, as it makes the injury appear very much worse than it really was. After the word muscle, in the fourth line, it should read thus:—"and perhaps small portions of the brachialis anticus, supinator radii longus and the extensor carpi radialis longus; the brachial artery, the median and brachial nerves, the accompanying cellular and adipose tissues," &c. The above-named artery and nerves were not materially injured, and it was from this fact that the effort was made to preserve the limb.

Yours truly,

EDWARD BARTON.

Orange, Aug. 18, 1862.

THE BERKSHIRE MEDICAL SOCIETY.—Agreeably to the invitation, mentioned in our issue of the 17th ult., to the members of this Society to meet at the house of its late President, Dr. Clarkson T. Collins, in Great Barrington, a large number assembled there on the 30th, and after the transaction of business in the morning, repaired to his institution in the afternoon to dine. About seventy individuals—including, besides members of the Society, ladies, doctors, clergymen, lawyers, and unprofessional gentlemen—sat down to the tables, which are reported to have been richly decorated and abundantly supplied with delicious viands, rich condiments and sparkling beverages. After the repast, and a cordial welcome expressed by the host, speeches were made by many distinguished gentlemen,—including ex-Gov. Childs of the Berkshire Medical Institution, several clergymen of the vicinity, Hon. Increase Sumner, Hon. S. S. Hamlin of Cincinnati, Joseph Tucker, Esq., Hon. S. B. Sumner (who delivered an appropriate and humorous poem), William Sherwood the author and poet, Hon. Thomas Plunkett, Col. Twining and others. The festival was closed by an evening reception of between one and two hundred ladies and gentlemen, who remained till a late hour. Everything is represented to have passed off with great animation and success, and the meeting was equal to any of the similar ones which have been held under the same hospitable roof.

ABSENT SURGEONS CALLED TO DUTY.—The Government is desirous that all surgeons, now absent on furloughs, should immediately report to their regiments, and that all vacancies left by regimental surgeons should be immediately filled by the Governors of the several States.

WE are glad to record an act of unobtrusive kindness which in a small way has been the means of adding materially to the comfort of the patients in the Mass. General Hospital. Mr. O. H. P. Burnham, No. 143 Washington street, has, through the instrumentality of a benevolent lady who is a constant visiter at the Hospital, for several years supplied the inmates of that Institution gratuitously with such light reading as the somewhat limited library of the Institution does not afford. This generosity is fully appreciated, and is a great resource to the patients.

Dr. Charles Alexander of Farmington, is Surgeon, and Dr. Augustus B. Farnham of Bangor, Assistant Surgeon, of the 16th Maine Regiment, which has just left home for the seat of war.

The late Surgeon-General, Clement A. Finlay, of Ohio, has been retired from service at his own request. He has been in the service forty years.

George V. Winslow, of Massachusetts, and James Kinnier, of New York, have been appointed naval Acting Assistant Surgeons, and ordered to report to Captain Wilkes.

Dr. Orrin Warren, of West Newbury, is Surgeon; and Drs. Wm. S. Brown, of Boston, and Daniel P. Gage, of Lowell, Assistant Surgeons, of the 33d Regt. Massachusetts Volunteers, which left Boston last week for the seat of war.

At a meeting of the Trustees of the Jefferson Medical College, on the 22d July, Dr. Ellerslie Wallace was elected Professor of Obstetrics and Diseases of Women and Children.

The London *Lancet* states that a meeting of the Council of the College of Physicians, Edinburgh, was held on the 20th of June, to decide the question of the admission of ladies to the medical profession. On a division, sixteen members voted for the proposal, and eighteen against it.

The attention of our readers is called to the advertisement, in to-day's issue, by an old subscriber, of a complete set of this JOURNAL. The older volumes of the work are now becoming so scarce, that an opportunity seldom occurs of securing a full set: and any individual or association desirous of possessing one, would do well to obtain that now offered.

The recent delays in the issue of the Journal, have been in part caused by interruptions in the office consequent upon calls for military duty. We hope soon to make arrangements for its prompt appearance again, and trust our readers will bear with us in this and various other short-comings during these exciting times.

VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, AUGUST 16TH, 1862.

DEATHS.

	Males.	Females.	Total.
Deaths during the week, ...	64	48	112
Average Mortality of the corresponding weeks of the ten years, 1851-1861,	55.3	48.9	104.02
Average corrected to increased population, ...	..	..	118.92
Deaths of persons above 90, ...	..	1	1

Mortality from Prevailing Diseases.

Phthisis.	Chol. Inf.	Croup.	Scar. Fev.	Pneumonia.	Variola.	Dysentery.	Typ. Fev.	Diphtheria.
8	30	2	8	3	0	6	2	1

DIED,—At Saco, Me., on the 7th inst., Dr. Henry B. C. Greene, eldest son of the late Dr. H. B. C. Greene, of Boston.

DEATHS IN BOSTON for the week ending Saturday noon, August 16th, 112. Males, 64—Females, 48.—Accidents, 3—congestion of the brain, 1—disease of the brain, 1—inflammation of the bowels, 2—cholera infantum, 30—cholera morbus, 2—consumption, 8—convulsions, 2—croup, 2—diarrhea, 2—diphtheria, 1—dropsy, 1—dropsy of the brain, 5—drowned, 1—dysentery, 6—epilepsy, 1—bilious fever, 1—scarlet fever, 8—typhoid fever, 2—gastritis, 1—hemoptysis, 1—disease of the heart, 2—infantile disease, 1—insanity, 2—intemperance, 2—jaundice, 1—disease of the kidneys, 1—disease of the liver, 2—inflammation of the lungs, 3—marasmus, 5—measles, 1—old age, 2—paralysis, 1—polysarcia, 1—sunstroke, 1—unknown, 6.
Under 5 years of age, 63—between 5 and 20 years, 4—between 20 and 40 years, 20—between 40 and 60 years, 8—above 60 years, 12. Born in the United States, 91—Ireland, 17—other places, 4.